NPDES Permit No. NN0030335

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.; the "Act"),

Navajo Tribal Utility Authority
Navajo Townsite
P.O. Box 170
Fort Defiance, Arizona 86504

is authorized to discharge treated wastewater from the Navajo Townsite wastewater treatment lagoon facility located in Red Lake Chapter in Navajo, McKinley County, New Mexico, from Discharge Outfall Number 001,

Latitude: 35° 54' 05 " N
Longitude: 109° 02' 39 " W

to receiving waters named Black Creek, a tributary to Puerco River, an eventual tributary to the Little Colorado River, in accordance with effluent limitations, monitoring requirements and in the attached 10 pages of EPA Region 9 "Standard Federal NPDES Permit Conditions," dated June 3, 2002.

This permit shall become effective on December 23rd, 2006 .

This permit and the authorization to discharge shall expire at midnight, December 22nd, 2011.

Signed this 20th day of December, 2006

For the Regional Administrator,

/s/ Nancy Woo, for

Alexis Strauss, Director
Water Division
EPA, Region 9

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Based upon the current design flow rate of 0.32 MGD, the permittee is authorized to discharge from Outfall Number 001 treated domestic wastewater.

1. During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee shall not discharge to receiving waters, except from Discharge Outfall No. 001 as specified below.

2. The influent shall be sampled prior to it entering the lagoons. The effluent shall be sampled after final treatment prior to discharge to Black Creek, a tributary to the Puerco River, a tributary to the Little Colorado River. NTUA may sample for BOD_5, TSS, NH_3, TDS, pH and temperature after treatment but prior to chlorination. *E. coli* and total residual chlorine shall be sampled after chlorination.

3. Such discharge shall be limited and monitored by the permittee as follows:

Effluent Parameter	Units	Monthly Average	Weekly Average	Daily Maximum	Monitoring Frequency	Sample Type
Flow[1]	MGD	--	--	--	Once/month	Continuous
BOD_5[2]	mg/l	30	45	--	Once/month	Composite
	kg/day	36	54	--		
TSS[2]	mg/l	30	45	--	Once/month	Composite
	kg/day	36	54	--		
E. coli	#/100 ml	126[3]	--	235[4]	Once/month	Discrete
TRC[5]	µg/l	--	--	11.0	Once/month	Discrete
TDS[6]	mg/l	--	--	--	Once/quarter	Discrete
NH_3[7]	mg/l	--	--	--	Once/quarter	Discrete
Temperature[8]	deg F	--	--	--	Once/quarter	Discrete
pH[9]	std. units	between 6.5 to 9.0			Once/month	Discrete
Priority Pollutant Scan[10]	µg/l	--	--	--	Once/Year	Composite

NOTES:

1. Monitoring and reporting are required. No limit is set at this time.

2. Both the influent and the effluent shall be monitored for BOD_5 and TSS by concentration. The arithmetic mean of effluent sampling values, by weight, collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values, by weight, for influent samples collected over the same time period. (i.e., must demonstrate 85% removal of BOD_5 and TSS)

3. Geometric mean of samples collected during the calendar month.

4. Single sample maximum.

5. "TRC" = Total Residual Chlorine. If chlorination is used, the permittee shall at all times operate the plant to achieve the lowest possible residual chlorine while still complying with permit limits for *E. coli*.

   TRC shall also be measured once per month for both the effluent and in the receiving water immediately downstream of the discharge, and reported on the Discharge Monitoring Reports, along with an estimate of the natural flow of the stream.

6. Both the plant effluent (Outfall Number 001) and the intake water supply shall be sampled. The incremental increase is the difference between the two sample analyses. The effluent value, intake water supply value, and incremental increase value shall be reported.

   During periods of discharge, salinity (or Total Dissolved Solids) shall be determined by the "calculation method" (sum of constituents) as described in the latest edition of "Techniques of Water Resources Investigations of the United States Geological Survey– Methods for Collection and Analysis of Water Samples for Dissolved Minerals and Gases."

7. "NH_3" = un-ionized ammonia. No limit is set at this time but permittee must monitor once per quarter. Should the results of the first four quarters of tests reveal levels below EPA's National Water Quality Criteria for ammonia, the monitoring frequency will be decreased to once per year. See Section C (Permit Reopener) below.

8. Temperature and pH measurements shall be taken concurrently with measurements for ammonia, as ammonia toxicity is pH and temperature dependent.

9. Effluent pH units are based on the numeric standards for primary human contact, consistent with the Navajo Nation Surface water quality standards–July 2004 (Table 206A.1, page 26.)

10. Priority pollutants: The permittee shall monitor for the full list of priority pollutants as listed in the Code of Federal Regulations (CFR) at 40 CFR Part 423, Appendix A. No limit is set at this time.

    Should the results of the first test reveal levels below EPA's National Water Quality Criteria for priority pollutants, monitoring will no longer be required of the permittee. See Part B below.

SECTION B. GENERAL DISCHARGE SPECIFICATIONS

All Waters of the Navajo Nation shall be free from pollutants in amounts or combinations that, for any duration:

1. Cause injury to, are toxic to, or otherwise adversely affect human health, public safety, or public welfare.
2. Cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of indigenous aquatic plant and animal communities or any member of these

communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.

3. Settle to form bottom deposits, including sediments, precipitates and organic materials, that cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of indigenous aquatic plant and animal communities or any member of these communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.

4. Cause physical, chemical, or biological conditions that promote the habitation, growth or propagation of undesirable, non-indigenous species of plant or animal life in the water body.

5. Cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause a film or irridescent appearance on the surface of the water body; or that may cause a deposit on a shoreline, on a bank, or on aquatic vegetation.

6. Cause objectionable odor in the area of the water body.

7. Cause objectionable taste, odor, color, or turbidity in the water body.

8. Cause objectionable taste in edible plant and animal life, including waterfowl, that reside in, on, or adjacent to the water body.

SECTION C. PERMIT REOPENER

Should any of the monitoring results indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above water quality criteria, the permit may be reopened for the imposition of water quality based limits and/or whole effluent toxicity limits. Also, this permit may be modified, in accordance with the requirements set forth at 40 CFR Parts 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any new EPA-approved Tribal water quality standards.

SECTION D. BIOSOLIDS REQUIREMENTS

1. The permittee shall submit a report 60 days prior to disposal of biosolids. The report shall include:

a. A map showing biosolids handling facilities (e.g. digesters, lagoons, drying beds, incinerators, location of land application and surface disposal sites).
b. The quantity of biosolids produced in dry metric tons.

c. The treatment applied to biosolids including process parameters. For example, if the biosolids is digested, report the average temperature and retention time of the digester. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration. Also report dewatering methods and percent biosolids of final reports.

d. Disposal methods (e.g., 50% to landfill, 40% land applied, 10% sold as commercial product). Report the names and locations of all facilities receiving waste.

e. If biosolids are to be land-applied, analyses shall be conducted and submitted for Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Molybdenum, Zinc, and Selenium, and for organic-N, ammonium-N, and nitrate-N. The analyses shall be performed using the methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846) and test results shall be expressed in milligram (mg) pollutant per kilogram (kg) biosolids on a 100% dry weight basis.

f. If biosolids are placed in a surface disposal site, analyses shall be submitted for Arsenic, Chromium, and Nickel. A groundwater monitoring plan shall be submitted or a certification from a groundwater scientist that there is no potential for groundwater contamination.

2. The permittee shall comply with all standards for biosolids use and disposal established under Section 405(d) of the Clean Water Act, including existing standards under 40 CFR Parts 257, 258 and 503.

3. Reports for biosolids monitoring shall be submitted to:

Regional Biosolids Coordinator
US EPA (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

SECTION E. MONITORING AND REPORTING

I. Reporting of Monitoring Results

A. Monitoring results shall be reported on Discharge Monitoring Report (DMR) forms (EPA No. 3320-1) to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the permit.

Monitoring results obtained during the previous three (3) months shall be summarized and reported on forms to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms. Unless otherwise specified, discharge flow shall be reported in terms of

the average flow over that 30 day period. These reports are due January 28, April 28, July 28, and October 28 of each year. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the Navajo Nation EPA at the following addresses:

Regional Administrator	Navajo Nation EPA
Environmental Protection Agency	NPDES Program
Region IX, Attn: WTR-7	P.O. Box 339
75 Hawthorne Street	Window Rock, AZ 86515
San Francisco, CA 94105	

B. For effluent analyses, the permittee shall utilize an EPA-approved analytical method with a Method Detection Limit (MDL) that is lower than the effluent limitations (or lower than applicable water quality criteria if monitoring is required but no effluent limitations have been established.) MDL is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by the specific laboratory method listed in 40 CFR Part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.

C. If all published MDLs are higher than the effluent limitations (or applicable criteria concentrations), the permittee shall utilize the EPA-approved analytical method with the lowest published MDL.

D. The permittee shall develop a Quality Assurance (QA) Manual. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. As appropriate and applicable, the QA Manual shall include the details enumerated below. The QA Manual shall be retained on the permittee's premises and be available for review by USEPA or Navajo Nation EPA upon request. The permittee shall review its QA Manual annually and revise it when appropriate. Throughout all field sampling and laboratory analyses, the permittee shall use quality assurance/quality control (QA/QC) procedures as documented in their QA Manual.

1. Project Management including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples.

2. Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicatives, and equipment or field blanks); preservatives and holding times for the samples (see 40 CFR Part 136.3).

3. Identification of the laboratory to be used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; required QC results to be

reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.

4. Discussion of how the permittee will perform data review and requirements for reporting of results to USEPA or Navajo Nation EPA to include resolving of data quality issues and identifying limitaitns on the use of the data.

E. Sample collection shall be performed as stated in the QA Manual. The QA Manual shall include a discussion on the preservation and handling, preparation and analysis of samples as described in the most recent edition of 40 CFR 136.3, unless otherwise specified in this permit.

II. Monitoring and Records

In addition to the information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: Laboratory(ies) which performed the analyses and any comments, case narrative or summary of results produced by the laboratory. These should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR Part 136 requirements were met. The summary of results must include information on inititial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times, and preservation.

III. Twenty Four-Hour Reporting of Noncompliance

The permittee shall report any compliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following persons or their offices:

CWA Compliance Office Manager
U.S. EPA Region 9
(415) 972-3505

If the permittee is unsuccessful in contacting the person above, the permittee shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps or planned to reduce, eliminate, and prevent reoccurence of the noncompliance.

SECTION F. DEFINITIONS

The following definitions shall apply unless otherwise specified in this permit:

1. “Composite sample” means, for flow rate measurements, the arithmetic mean of no fewer than 8 individual measurements taken at equal intervals for eight (8) hours or for the duration of discharge, whichever is shorter. A composite sample means, for other than flow rate measurement, a combination of eight (8) individual portions obtained at equal time intervals for eight (8) hours or for the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling. The sampling period shall coincide with the period of maximum discharge flow.

2. “Discrete sample” means any individual sample collected in less than 15 minutes.

3. “Daily discharge” means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar for purposes of sampling. For pollutants with limitations expressed in terms of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the sampling day. “Daily discharge” determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the “daily discharge” determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that sampling day.

4. “Daily maximum” discharge limitation means the highest allowable “daily discharge” during the calendar month.

5. “Daily average” discharge limitation means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

6. “EPA” means the United States Environmental Protection Agency.

7. “Grab” sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

8. “Instantaneous” measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.“Monthly average”(or 30-day average) is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.

9. “Monthly average” concentration limitation means the arithmetic mean of consecutive measurements made during a calendar month. The “monthly average” concentration for fecal or total coliform bacteria means the geometric mean of measurements made during a month. The geometric mean is the nth root of the product of n numbers.

10. “Monthly average” mass limitation means the total discharge by mass during a calendar

month, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the monthly average value shall be determined by the summation of all the measured discharges by mass divided by the number of days during the month when the measurements were made.

11. "Regional Administrator" means EPA Region 9's Regional Administrator.

12. "Weekly average" (or 7-day average) is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.